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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
07/728,428	07/11/1991	JO ANN M. CANICH	89B010-D-1	5216
23455	7590	09/14/2006	EXAMINER	
EXXONMOBIL CHEMICAL COMPANY			RABAGO, ROBERTO	
5200 BAYWAY DRIVE			ART UNIT	
P.O. BOX 2149			PAPER NUMBER	
BAYTOWN, TX 77522-2149			1713	

DATE MAILED: 09/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

07/728,428

Applicant(s)

CANICH, JO ANN M.

Examiner

Roberto Rábago

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 27 and 44-63 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27 and 44-63 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Continued Examination***

1. Since this application is eligible for the transitional procedure of 37 CFR 1.129(a), and the fee set forth in 37 CFR 1.17(r) has been timely paid, the finality of the previous Office action is hereby withdrawn pursuant to 37 CFR 1.129(a). Applicant's first submission after final filed on 8/8/2006 has been entered.
2. Prior indication of claims 27, 44 and 45 as allowable over prior art is withdrawn in view of newly located references, as set forth below.

### ***Claim Objections***

3. (a) In claim 45, line 1, "herein" should be changed to "wherein."  
(b) In claim 56, line 2, "of" should be changed to "or."  
(c) In claim 60, "of" should be changed to "or."  
(d) Claim 62 requires a period at its end.

### ***Claim Rejections - 35 USC § 112***

4. Claims 27 and 44-63 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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(a) In claim 27 (and all claims dependent thereon), in the second drawn structure, the heteroatom ligand attached to M' is not understood, and appears to have been muddled during photocopying.

(b) In claim 27 (and all claims dependent thereon), parameter R' is undefined, yet R is defined twice.

(c) In claim 27 (and all claims dependent thereon), parameter M' is undefined, yet M is defined twice. In response to this rejection, applicants are requested to remove all of the superfluous quotation marks for the parameters defined in claim 27. As indicated by rejections 4(b) and 4(c), such use merely confuses the notation. It is noted that applicants have not used extra quotation marks in the parameter descriptions in any of the other claims of the application. If applicants amend the claim to remove the superfluous quotation marks as requested, they are excused from using strikethrough or double brackets to indicate deletion of such marks, as this would further complicate the claim. For example, parameter R' should be simply written as R', and not as "R".

(d) In claim 48 (and all claims dependent thereon), it is not understood how the Cp ring could be substituted with five substituents, or how x could be 5, because y is always 1.

(e) Claim 53 is not understood because titanium is not within the scope of the parent claim.

(f) Claim 63 is not understood because it depends from a cancelled claim.

***Claim Rejections - 35 USC § 102***

5. Claim 27 is rejected under 35 U.S.C. 102(e) as being anticipated by Tomotsu et al. (US 5,276,117).

Reference Example 1 discloses  $\text{Me}_5\text{CpTi}(\text{OMe})_3$  with  $\frac{1}{2}$  molar equivalent of ethylene glycol, including all claimed limitations.

***Claim Rejections - 35 USC § 103***

6. Claims 27, 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell et al. (US 5,045,517).

Reference Examples 2-12 disclose a variety of Ti complexes within the scope of the claims, including CpTi phenoxy dichloride. Missing from the example is the inclusion of component L. However, one of ordinary skill in the art would be motivated to add a component L because patentee suggests the addition of alcohols at col. 2, lines 31-39.

***Double Patenting***

7. Claim 43 is provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 16 of copending Application No. 07/963,833. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

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8. Applicants have re-instated previously cancelled subject matter directed to bridged compounds in new claims 48-63. During earlier prosecution in this application, these species were rejected under obviousness-type double patenting over numerous prior patents (see Office action mailed 3/30/2005); accordingly, these ODP rejections are again applied as set forth below.

9. Claims 48-63 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3 and 5 of U.S. Patent No. 7,041,841. Although the conflicting claims are not identical, they are not patentably distinct from each other because, despite minor differences in wording and scope, substantially the same compounds are being claimed. Although the patented claims are limited to  $x=2$  or  $4$ , these embodiments are specifically claimed in the instant application.

10. Claims 48-63 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, and 6-9 of U.S. Patent No. 5,621,126. Although the conflicting claims are not identical, they are not patentably distinct from each other because, despite minor differences in wording and scope, substantially the same compounds are being claimed.

11. Claims 48-63 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 of U.S. Patent No. RE 37,788.

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Although the conflicting claims are not identical, they are not patentably distinct from each other because, despite minor differences in wording and scope, substantially the same compounds are being claimed.

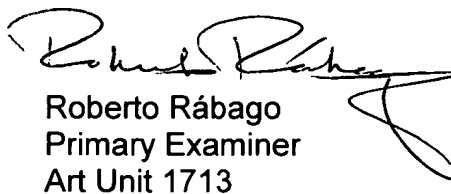
12. Claims 48-63 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,617,466. Although the conflicting claims are not identical, they are not patentably distinct from each other because, although the patented claims are directed to the process of making the compound, the instant claims are not separately patentable because the patented claims necessarily make the same product as applicants are now claiming.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberto Rábago whose telephone number is (571) 272-1109. The examiner can normally be reached on Monday - Friday from 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Roberto Rábago  
Primary Examiner  
Art Unit 1713

RR  
September 10, 2006